

Gametes

(Read both and choose 1 for chart)

Gametes are reproductive cells that unite during sexual reproduction to form a new cell called a zygote, which then usually undergoes a series of cell divisions until it develops into a complete organism. In humans, male gametes are sperm and female gametes are ova (eggs). Sperm are motile and have a long, tail-like projection called a flagellum. Ova however, are non-motile and relatively large in comparison to the male gamete.

Gametes are produced by a type of cell division called meiosis. They are haploid, meaning that they contain only one set of chromosomes. When the haploid male and female gametes unite in a process called fertilization, they form what is called a zygote. The zygote is diploid and contains two sets of chromosomes.



Sperm

A male who has reached puberty will produce millions of sperm cells every day. Each sperm is extremely small: only 1/600 of an inch (0.05 millimeters long). At birth, these are simple round cells, but during puberty, testosterone and other hormones cause these cells to transform into sperm cells. The cells divide and change until they have a head and short tail, like tadpoles. The head contains genetic material (DNA). The sperm use their tails to push themselves into the epididymis, where they complete their development. If the sperm travels and penetrates an egg cell, fertilization occurs.

Egg

The egg cell (or ovum, or oocyte) is the largest human cell. It measures 0.15 to 0.2 mm and is just visible to the naked eye. It is also the roundest cell, almost perfectly round. It has the largest volume in relation to its surface area.

<http://kidsresearchexpress.blogspot.com/2008/08/gamete.html>

<http://biology.about.com/od/geneticsglossary/g/gametes.htm>

<http://www.dynamisch.nu/feno/english/e8embryo3.html>